

STEPANOV, V.V.; KUDRYASHOV, A.V.; RYBALTOVSKIY, Ye.V.

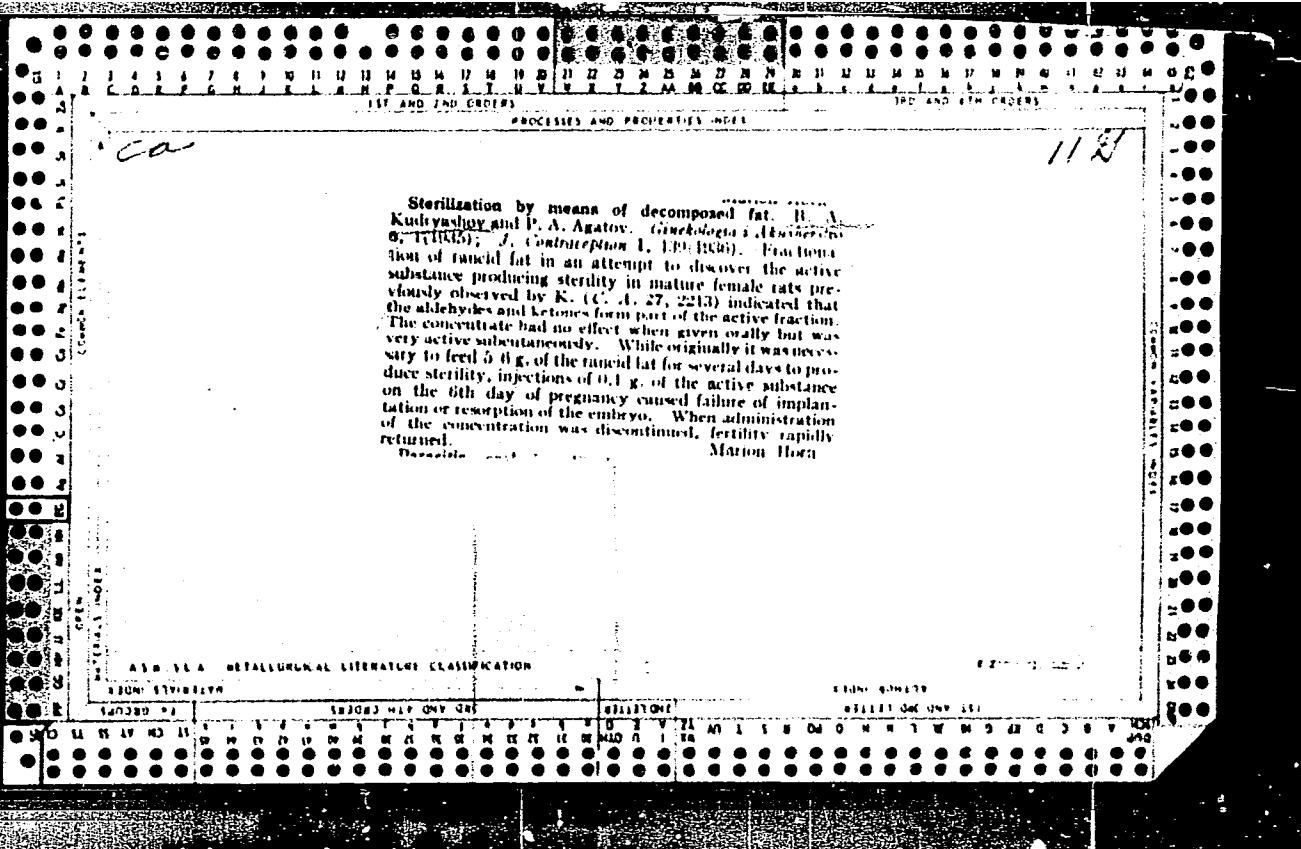
Structures igneous activity, and metal potential of the
Alaygyrskiy and Saranskiy ore regions. Trudy Inst.geol.nauk
AN Kazakh.SSR 6:28-57 '62. (MIRA 16:6)
(Kazakhstan--Ore deposits)
(Kazakhstan--Geology, Structural)

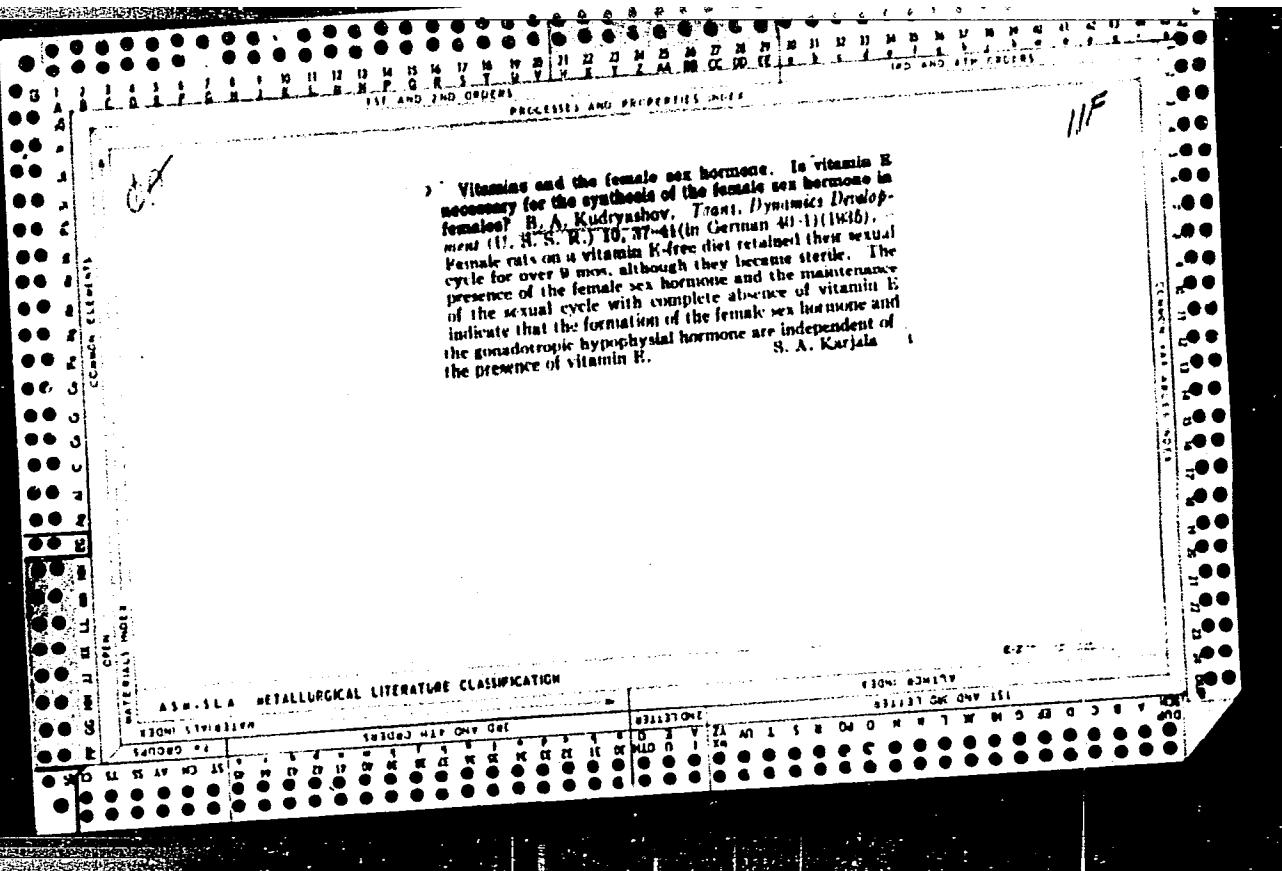
KUDRYASHOV, A.V.

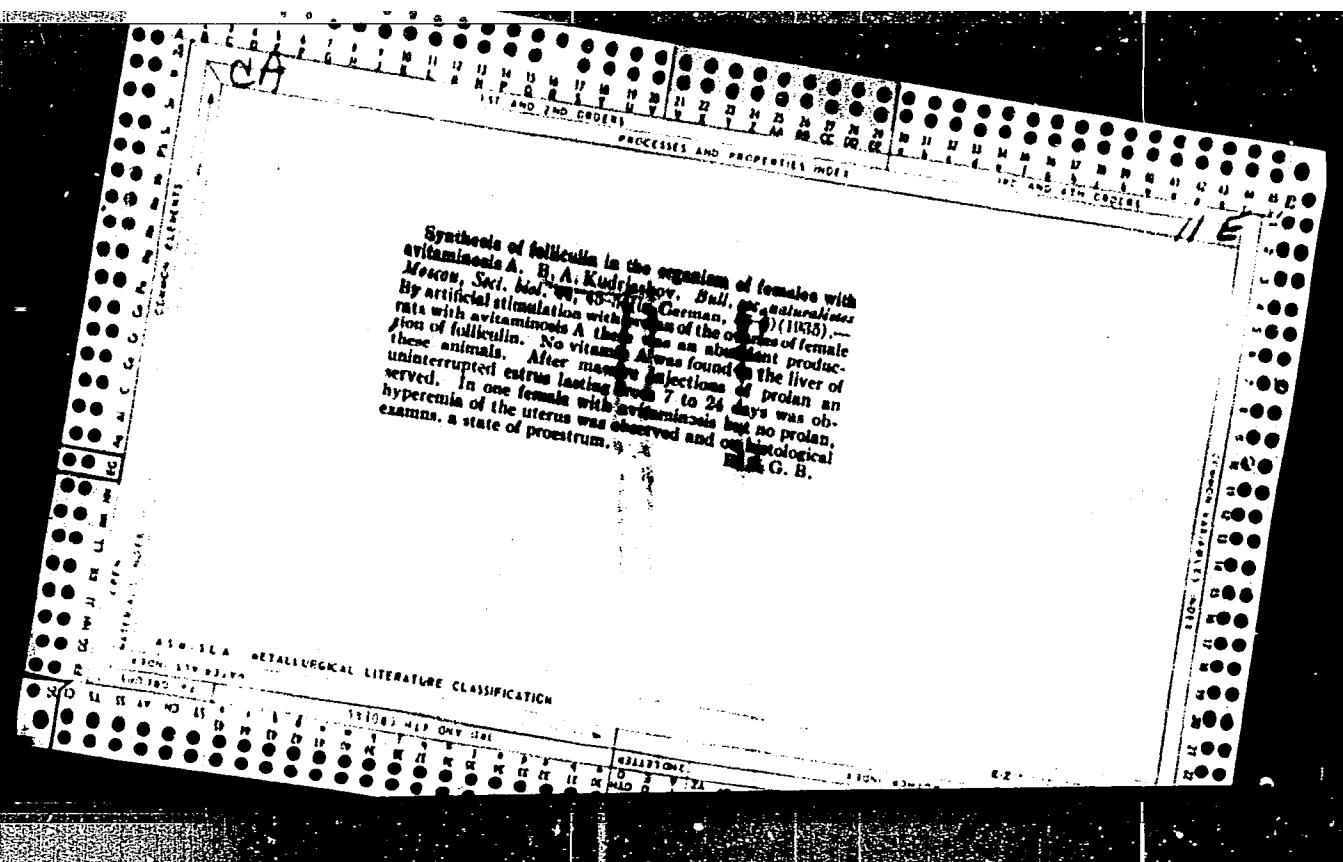
Alkali feldspars from stockworks in acid volcanite and granites.
Trudy Inst.geol.nauk AN Kazakh.SSR 6:193-209 '62. (MIRA 16:6)
(Feldspar)

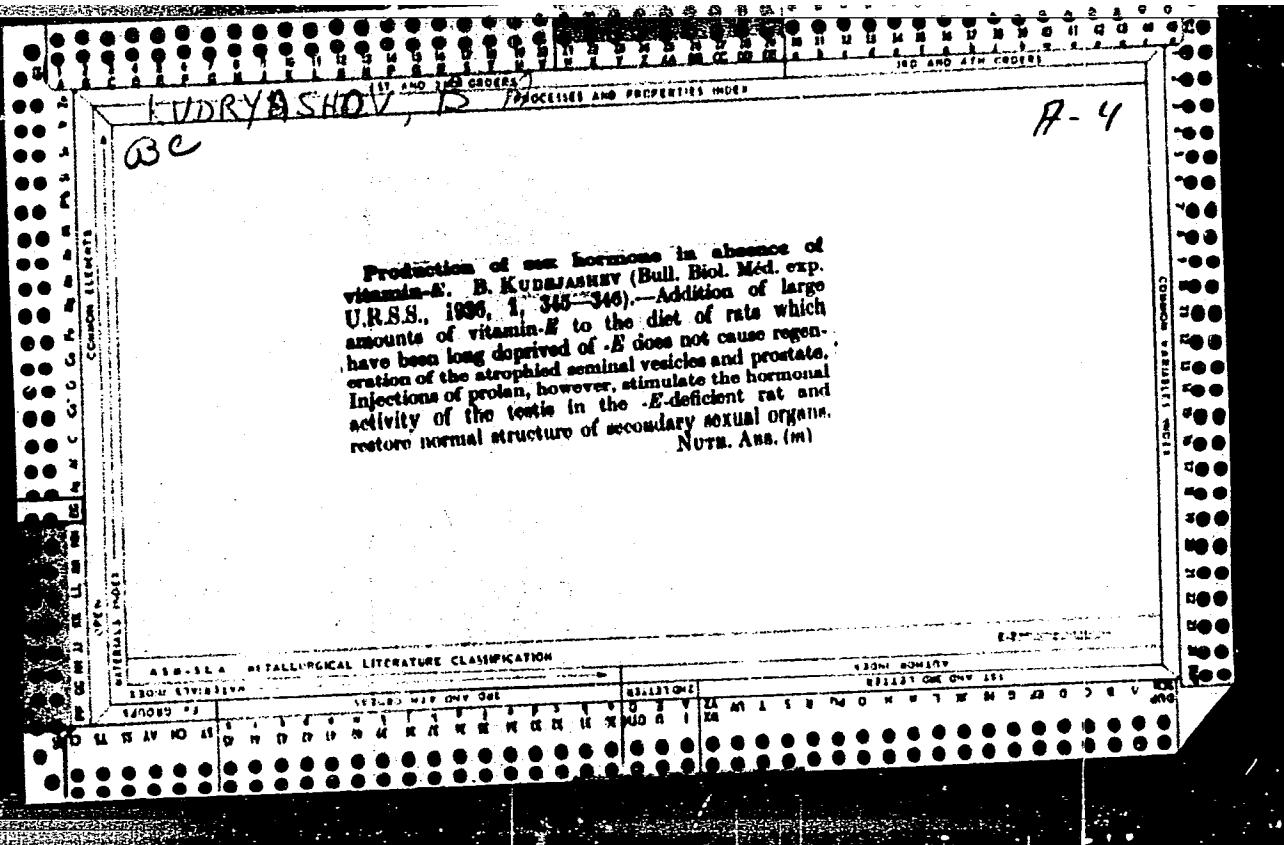
SHCHERBA, G.N.; YERSHOV, B.V.; IVANOV, A.I.; KUDRYASHOV, A.V.;
SENCHILO, N.P.

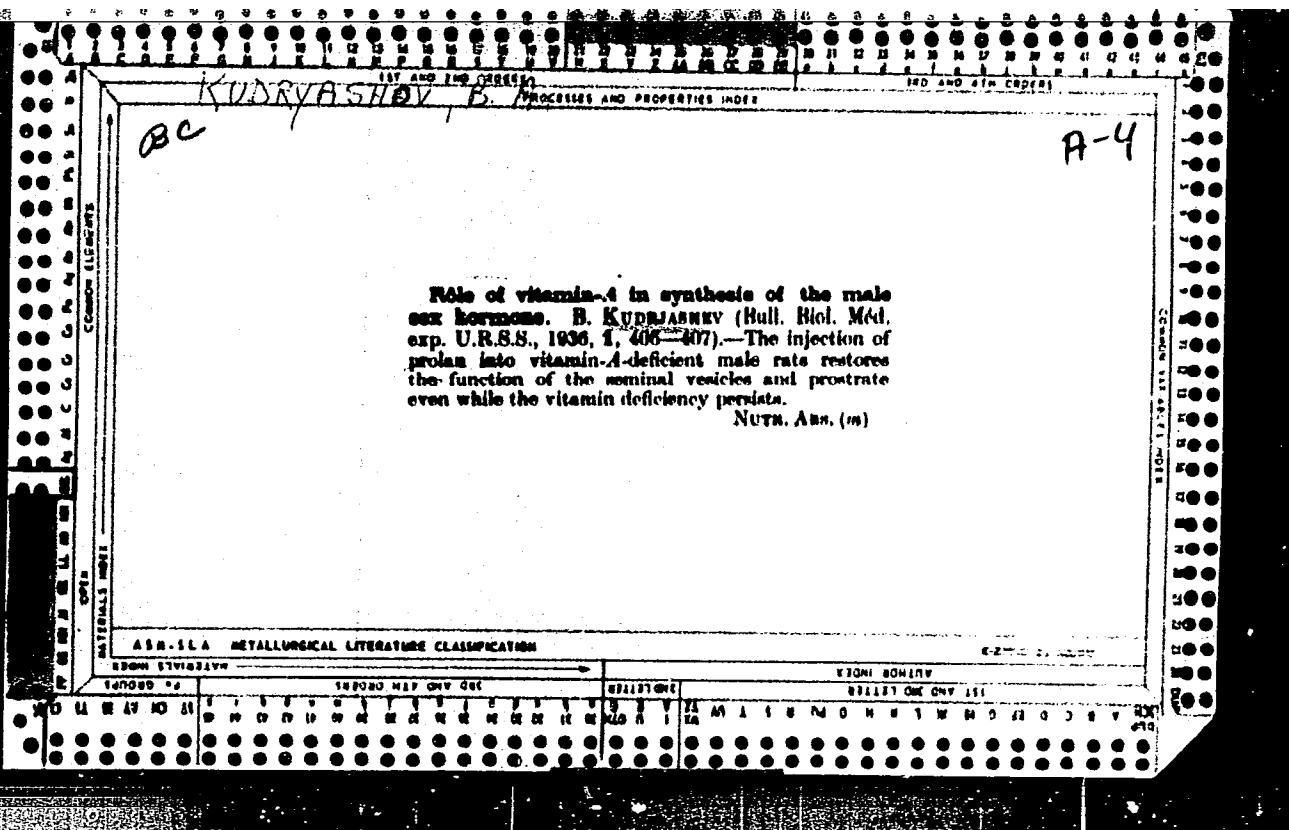
Possible Mesozoic age of the Khorgos intrusive complex in the
Dzungarian Ala-Tau. Trudy Inst.geol.nauk AN Kazakh.SSR 6:226-236
'62. (MIRA 16:6)
(Dzungarian Ala-Tau—Geological time)











四

PROCESSES AND PROPERTIES INITI

三

Vitamin E and the vitality of the spermatozoa of insects.
Studies on Periplaneta orientalis. B. A. Kudryashov and
 O. A. Petrovskaya. *Bull. biol. med. exp. U. R. S. S.* 4,
 400-2 (1937) (in German).—The elimination of vitamin E
 from the diet (18% casein, 64% starch, 22% lard, 2% cod-
 liver oil and 4% of McCollum's salt mixture 185) of male
Periplaneta orientalis for 4-8 months has no effect on the
 vitality of the mature spermatozoa of the insects. Ether
 exts. of insects on a vitamin E-free diet and of those on a
 normal diet and on one rich in vitamin E did not cause
 sterility in female rats on a vitamin E-free diet. Thus

1 vitamin E is present in these insects in very small amounts, or is entirely absent. S. A. Karjalainen

卷之三

卷之三

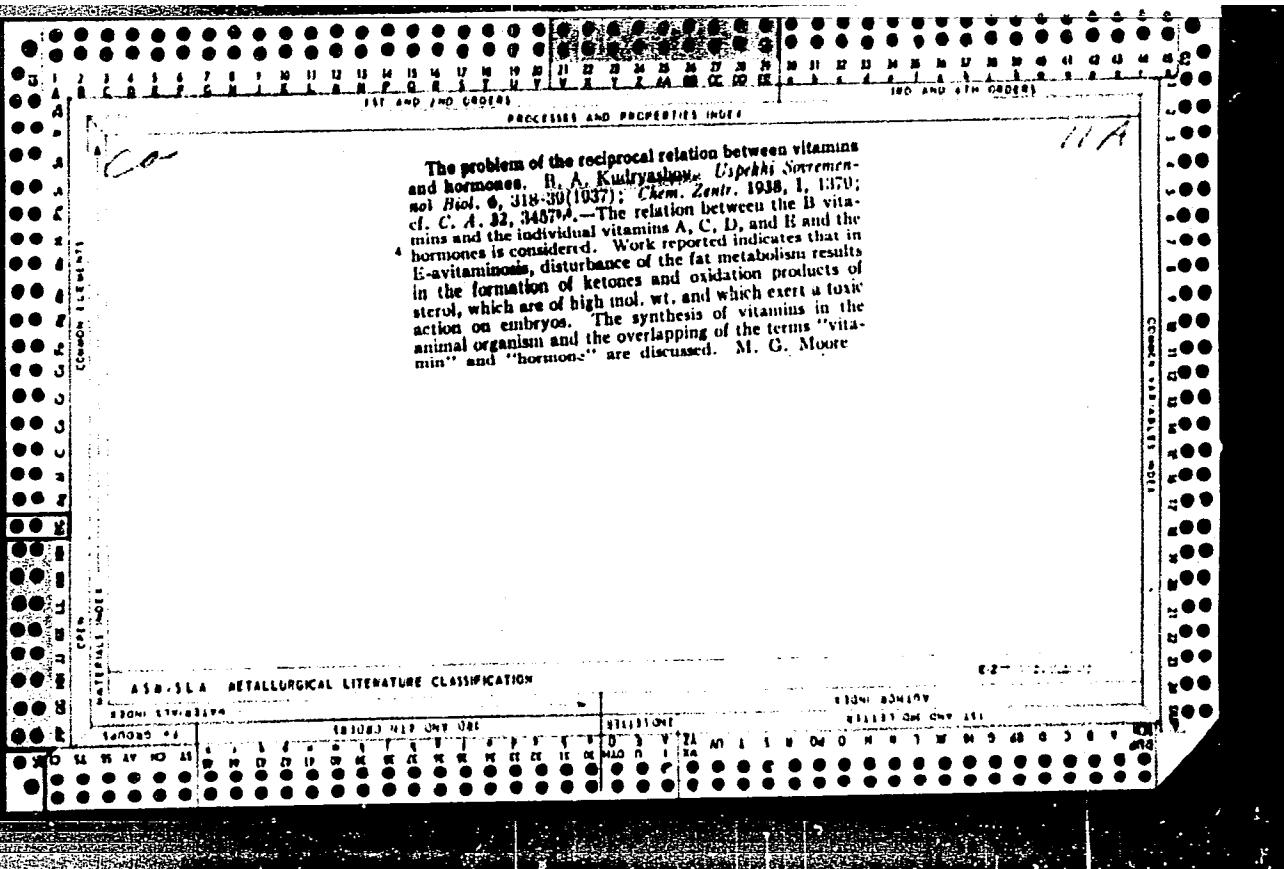
卷之三

卷之三

23

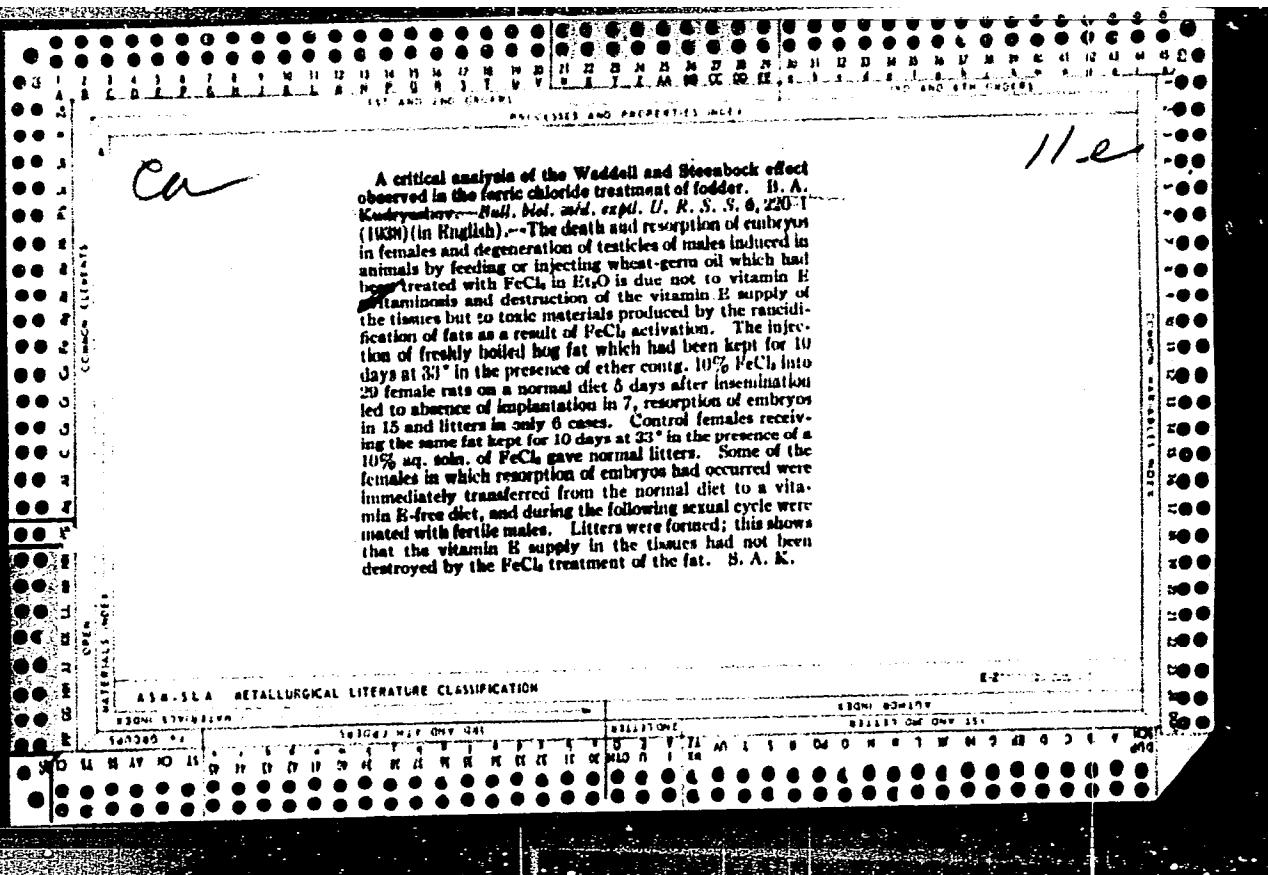
APPROVED FOR RELEASE: 07/12/2001

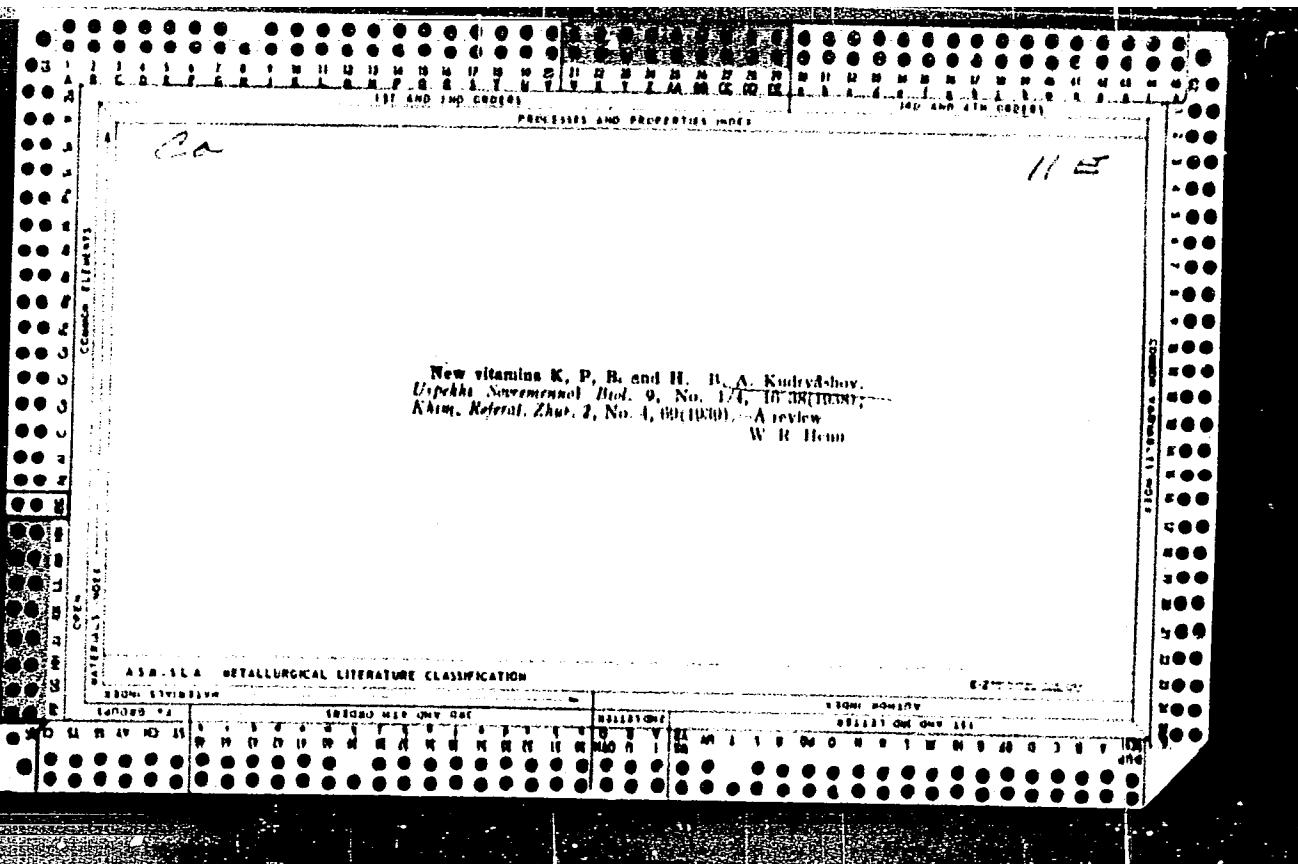
CIA-RDP86-00513R000827210002-9"

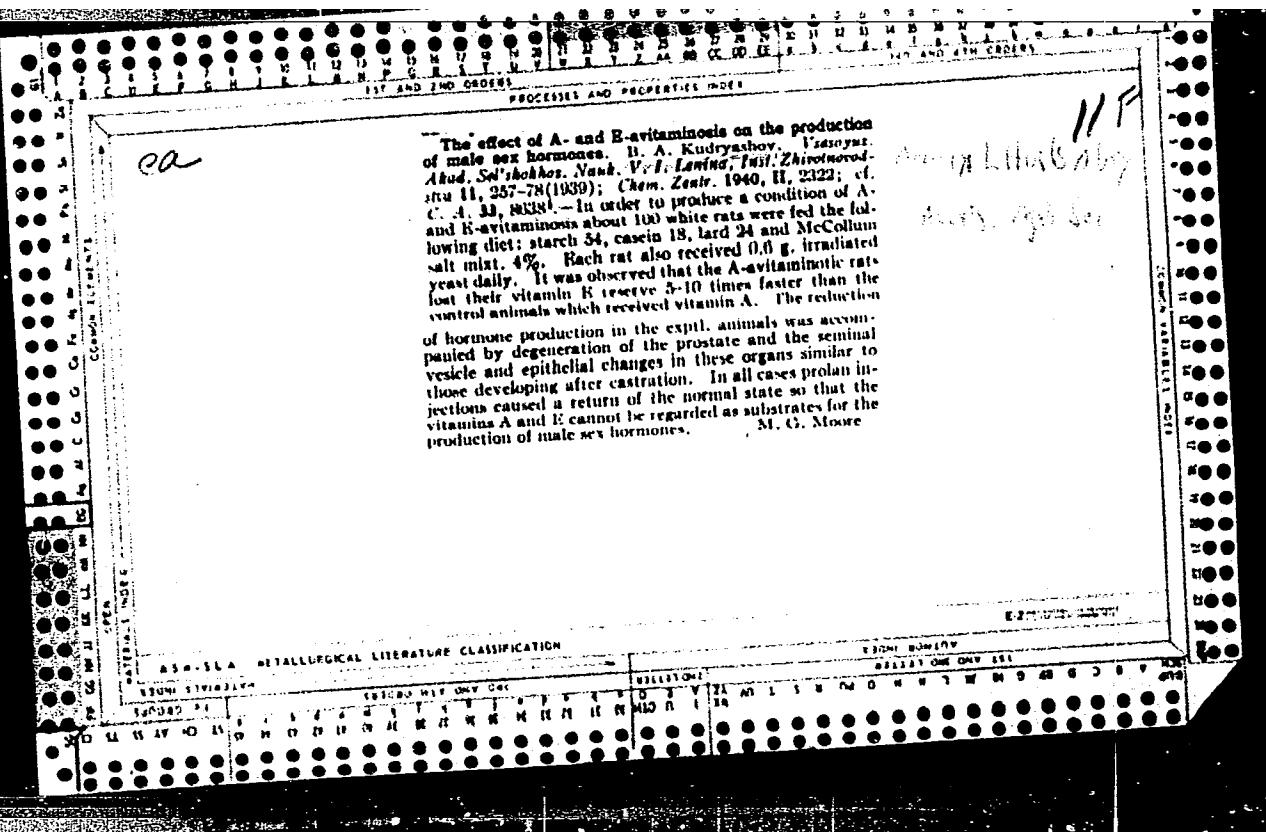


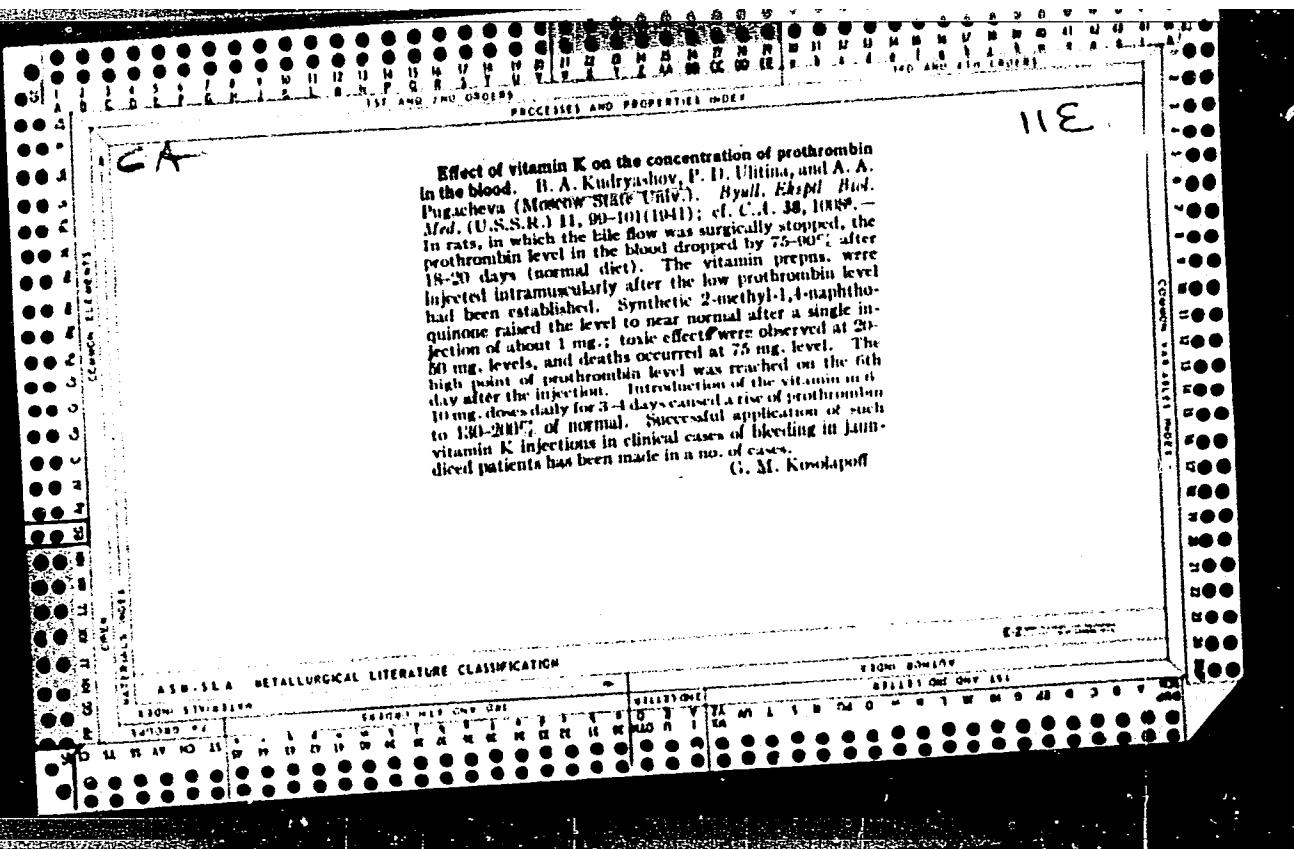
KUDRJOSHOV, B. A.

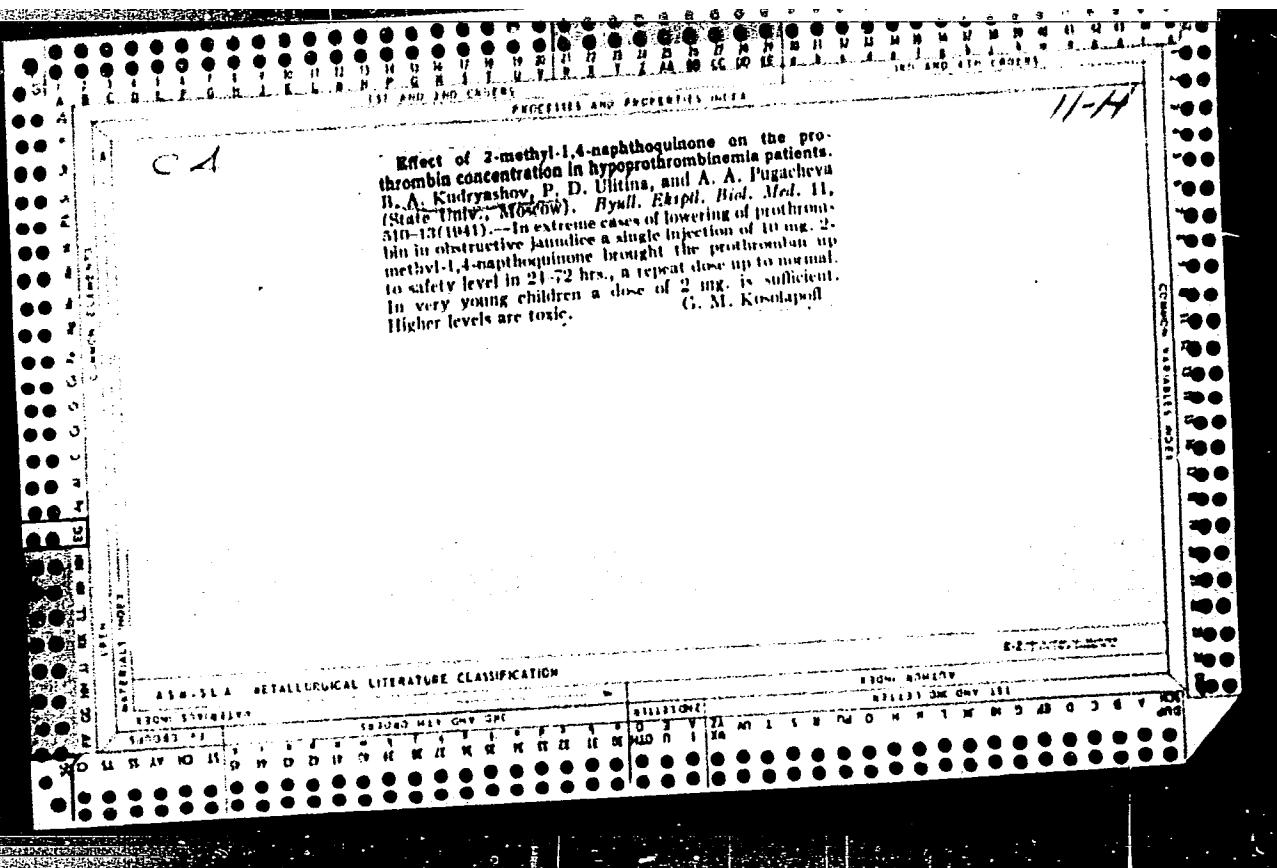
"On the nature and physiological role of vitamin E." (p. 198) by Kudrjoshov, B. A.
SO: Advances in Contemporary Biology (Uspuki Sovremennoi Biologii) Vol. VII, No. 2,
1937.

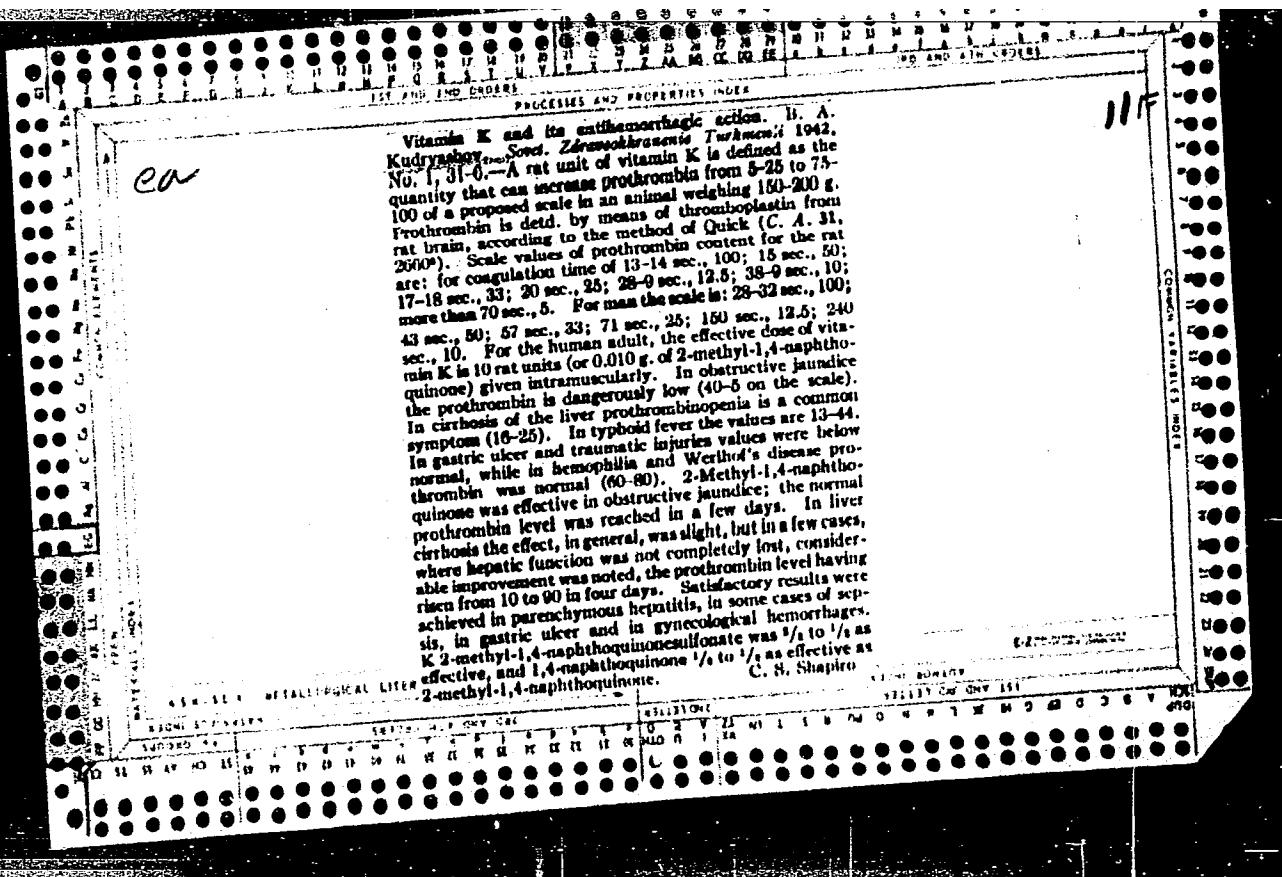








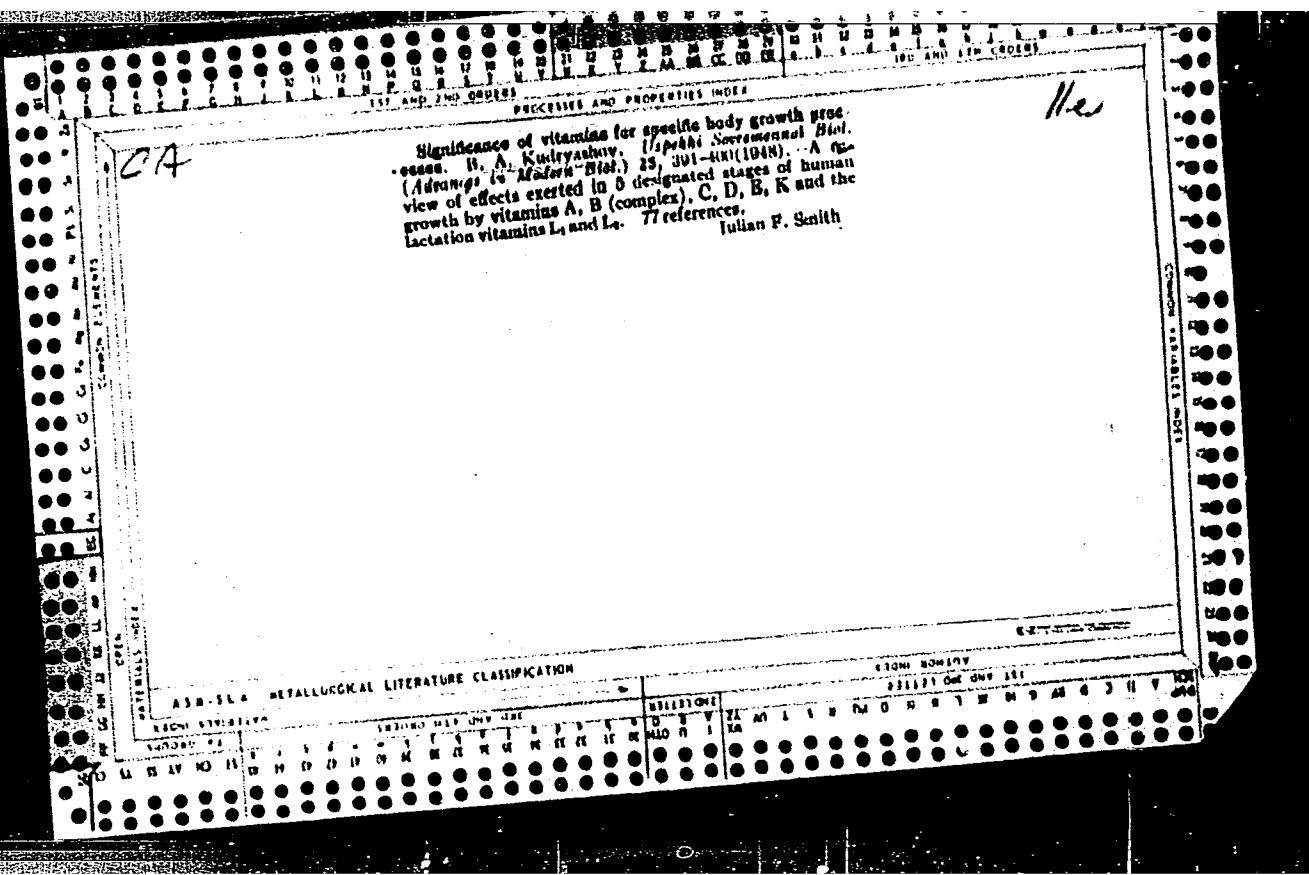




KUDRYASHOV, B. A.

Biological foundations in the theory on vita-mines Moskva, Sovetskaia nauka,
1948. 542 p.

1. Vitamins.



KUDRYASHOV, B. A.

PA 78T42

USER/Medicine - Blood, Coagulation
Medicine - Agglutins and Agglutination

Jun 1948

"A New Component in the Process of the Coagulation of Blood," B. A. Kudryashov, Inst of Zool, Moscow State U imeni M. V. Lomonosov, 3½ pp

"Dok Ak Nauk SSSR" Vol IX, No 8

Describes characteristics and nature of "trombotropia," substance that authors claim greatly facilitates the coagulation processes of blood. Submitted by Acad I. I. Shmal'gauzen 12 Apr 1948.

78T42

KUDRYASHOV, B. A.

PA 45/49T66

USSR/Medicine - Hematology

Medicine - Blood, Coagulation

Dec 48

*Thrombotropin as a Regulator of Blood-Coagulation Speed in Various Types of Animals and Man, "G. G. Berez'yan, B. A. Kudryashov, Inst of Zool, Moscow State Univ M. V. Lomonosov, 2 pp

"Dok Ak Nauk SSSR" Vol LXIII, No 4

Experimental check on hypothesis that different speed of blood coagulation in different animals is dependent on different concentrations of thrombopropin. Conducted tests on thrombopropin content in the blood of a man, a horse, a cat, a dog,

45/49T66

USSR/Medicine - Hematology (Contd) Dec 48

and a rat. Hypothesis held true for all cases except the horse. Submitted by Acad. Ye. O. Faras, 5 Oct 48.

45/49T66

KUDRYASHOV, B. A.

PA 45/49T67

USSR/Medicine - Zoology
Medicine - Vitamin K, Analogous

Dec 48

"Study of Biological Activity of Analogues of Vitamin K." P. D. Ultina, B. A. Kudryashov, Inst of Zool., Moscow State Univ. M. V. Lomonosov, & PI

"Dok Ak Nauk SSSR" Vol LXXXI, No 4

Obtains comparative data on activity of following compounds on mice: 2-methyl-1, 4-naphthoquinone, 2-methyl-1, 2-naphthoquinone-3-sulfuric acid potassium, and a bisulfite compound of 2-methyl-1, 4-naphthoquinone. Finds latter most valuable since it is easily soluble in water, has high

45/49T67

USSR/Medicine - Zoology (Contd)

45/49T67

activity of vitamin K, and is distinguished by extremely low toxicity in comparison with the other two substances. Submitted by Acad Ya. O. Parma, 5 Oct 48.

H
ULITINA, P.D., & KUDRYASHEV, B.A.

Specific nature of prothrombokinase and thrombotropin. Doklady
Akad. nauk SSSR 77 no.4:673-676 Apr 1951. (CLML 20:7)

1. Biological Soil Scientific-Research Institute of Moscow State
University imeni M.V. Lomonosov. 2. Presented by Academician A.I.
Oparin 29 January 1951.

KUDRYASHOV, B. A.

USSR/Medicine - Coagulation of Blood 21 May 52

"New Data on Tissue Thromboplastic Material (Prothrombokinase and Thrombokinase)," B. A. Kudryashov, F. D. Ulitina, Biol.-Soil Sci Res Inst, Moscow State University M. V. Lomonosov

"Dok Ak Nauk SSSR" Vol LXXXIV, No 3, pp 563-565

Presents data showing the existence of thrombokinase (activator of prothrombokinase) and its effectiveness for members of the same species only. According to the new theory proposed by the authors, thrombokinase does not initiate the coagulation of blood, as formerly assumed: the

225T17

process of coagulation begins with the action of thrombokinase on prothrombokinase, as a result of which thrombokinase is formed. Presented by Acad A. I. Oparin 20 Mar 52.

225T17

KUDRYASHOV, B.A.; ANDREYENKO, G.V., redaktor.

[The physiological and biochemical significance of vitamins] Fisiologicheskoe i biokhimicheskoe znachenie vitaminov. Moskva, Izd. Moskovskogo ob-va ispytatelei prirody, 1953. 174 p.
(MIRA 7:1)
(Vitamins)

ALBERT, Adrien, 1907- ; KUDRYASHOV, B. A., professor, redaktor.

[Selective toxicity] Izbiratel'naia toksichnost'. Moskva, Izd-vo
inostrannoi lit-ry, 1953. 214 p. (MIRA 7:2)
(Chemotherapy) (Physiological chemistry)

KUDRYASHOV, B.A.; MURAV'EVA, L.I.; ULITINA, P.D.

Species specificity of thrombogenic blood components. Doklady Akad.
(MLRA 6:2)
Nauk S.S.R. 88, 711-12 '53.
(CA 47 no.15:7621 '53)

I. M.V. Lomonosov State Univ., Moscow.

The three phases of blood coagulation differ in regard to the degree of species specificity shown in the interaction between thrombogenic components. The strongest species specificity is exhibited in the 1st phase (activation of prothrombinase with thrombopropin). In the 2nd phase (interaction of thrombinase with prothrombin in the presence of Ca ions), species specificity is not clearly pronounced. In the third phase (interaction of thrombin with fibrinogen), species specificity was not observed within the range of species investigated. Presented by Acad A. I. Oparin 25 Nov 52. 256T40

KUDRYASHOV, B.A.

Comparative study of properties of thromboplatin and Ac-globulin. B. A. Kudryashov and E. F. Yekhno. M. V. Lomonosov State Univ. Mag. "Doklady Akad. Nauk SSSR" 95, 123, p. 1954. Intrusion of thromboplastin into the epithelial tissues hinders synthesis of thromboplastin while the monophosphate of Ac-globulin does not. It is shown that the plasma of a rat treated with Ac-globulin has a higher thrombinogen content than the plasma of a normal rat. Both thromboplastin and Ac-globulin have a similar action, they appear to behave differently in the plasma due to the fact that at other pH levels their activities of clotting are not necessarily the same units. Thromboplastin can contract the Ac-globulin is adsorbed on the PVA. During the coagulation process are uncoated. After the coagulation process the M. v.

USSR/Biology - Biochemistry

Card : 1/1

Authors : Kudryashov, B. A., and Kalishevskaya, T. M.

Title : Critical analysis of the A. J. Quick hypothesis regarding the biochemical role of blood plasma in the process of blood coagulation

Periodical : Dokl. AN SSSR, 96, Ed. 5, 1029 - 1031, June 1954

Abstract : A critical analysis is presented on the A. J. Quick hypothesis regarding blood plasma and blood coagulation. The experimental results obtained by the authors do not confirm the Quick hypothesis but give basis to the belief that blood plasma is the source of prothrombokinesis and plasma contains thrombotropine as its activator. The substance in the blood plasma does not activate prothrombokinesis of the tissue but becomes itself activated by coming in contact with the plasma agent - thrombotropine. Twelve references. Tables.

Institution : The M. V. Lomonosov State University, Moscow

Presented by : Academician, V. A. Engel'gart, March 10, 1954

Kudryashov, B. A.

USSR/Medicine - Biochemistry

Card 1/1 Pub. 22 - 31/47

Authors : Kudryashov, B. A., and Ulitina, P. D.

Title : Study of the thromboplastic activity of blood

Periodical : Dok. AN SSSR 98/5, 815-817, Oct 11, 1954

Abstract : The relation between the amount of thrombokinase (thromboplastin), originating during the process of blood coagulation, and the concentration of thrombopropine in the plasma and the full-value of the prothrombokinase source, is explained. The deficiency of any one component was found to have a negative effect (limiting effect) on the formation of thrombokinase. The effect of dicumarol injection on the thromboplastic activity of the blood is explained. Seven USSR references (1948-1954). Tables.

Institution : The M. V. Lomonosov State University, Moscow

Presented by : Academician V. A. Engel'gardt, July 6, 1954

KUDRYASHOV, B. A.; PETROVSKIY, I. G.; OPARIN, A. I.; MEYER, K. I.; RUBIN, B. A.; SHAPOSHNIKOV, V. N.; STANKOV, S. S.; BELOZERSKIY, A. N.; KRECHETOVICH, L. M.; KOMARNITSKIY, N. A.; VORONIN, L. G.; ZENKEVICH, L. A.; MATVEYEV, B. S.; KUDRYASHOV, B. A.; YUDINISEV, S. D.; KLYUSHNIKOVA, Ye. S.; TSESHINSKAYA, N. I.; GOREUNOVA, N. P.; SIZOVA, T. P.
Lev Ivanovich Kursanov; obituary; nekrolog. Vest. Mosk. un. 10 no.2:
183-184 F '55. (MLRA B:5)
(Kursanov, Lev Ivanovich, 1876-1954)

Kudryashov, B. A.

USSR/ Medicine - Hematology

Card 1/1 Pub. 22 - 35/53

Authors :

Andreyenko, G. V., and Kudryashov, B. A.

Title : Change in the thromboplastic activity of the blood during introduction of

vitamin B₁₂ into the animal organism

Periodical :

Dok. AN SSSR 102/4, 787-788, Jun 1, 1955

Abstract :

Experiments were conducted on white rats to determine the change in the thromboplastic activity of their blood after intramuscular injection of vitamin B₁₂. As is evident from the blood chart, the intramuscular injection of B₁₂ leads to a considerable increase in the thromboplastic activity of the blood; after discontinuation of the vitamin injection the thromboplastic activity drops sharply to its normal physiological level. It was determined that the formation of blood prothrombinase in the organism connected with blood flakes is due mainly to the effects of the vitamin. Twelve references: 8 USSR and 4 USA (1948-1954). Table; graph.

Institution : The M. V. Lomonosov Moscow State University, Moscow

Presented by : Academician V. A. Engel'gardt, February 26, 1955

KUDRYASHOV B. A.

Change of the thromboplastic activity of blood and
strength of the capillaries after splenectomy. B. A. Kudry-
ashov, T. M. Kalishevskaya, and V. E. Pastoreva (et. al.). V.
Lomonosov State Univ., Moscow). Doklady Akad. Nauk
S.S.R. 107, 165-7 (1954).—Complete removal of the
spleen from white rats leads to a rapid and great drop in the
thromboplastic activity of blood. After 2 weeks there be-
gins a restoration of this function which is complete in some
4 weeks. Along with the drop in thromboplastic activity
there is a parallel drop in the strength of the capillaries,
whose restoration occurs somewhat earlier, however.
G. M. Kosolapov

3

KUDRYASHOV, B.A.

Strength of capillaries in antagonistic interaction of dicumarin and vitamin K in animal organism. V. B. Pastoreva and B. A. Kudryashov (M. V. Lomonosov State Univ., Moscow). Doklady Akad. Nauk S.S.R. 107, 340-2 (1956). Intramuscular injection of 1 mg./200 g. dose of dicumarin into rats in Na₂CO₃ soln. resulted in a drop of prothrombin level and in strength of capillaries. Simultaneous administration of dicumarin and an aq. soln. prep. of vitamin K (bisulfite complex of 2-methyl-1,4-naphthoquinone) (1 injection of 15 mg./200 g. and 2nd after 28 hrs. at 20 mg./200 g.) prevented the loss of capillary strength and kept prothrombin at a normal level. G. M. Kosolapoff.

KUDRYASHOV, B.A.

Comparative thermostability of fibrinolytic enzymes
Prothrombokinase B. A. Kudryashov, J. M. Sato, and Y. A. Iwasa
Proc. Natl. Acad. Sci. USA 70, 1135-1139 (1973)
Prothrombokinase molecule is more heat-stable than the enzyme from bacterial sources.
stands exposure to 45° for 1 hr. 11% loss of activity at 55° add back to 100%
loses 65% of activity at 75° after 1 hr. 10% loss of activity at 85° after 1 hr.
Thrombokinase from rat placenta is more heat-stable than the prothrombokinase from the same source.
Thrombokinase loses 10% of activity at 55° after 1 hr.
stable at 45°. Thrombokinase loses 90% of activity at 85° after 1 hr.

KUDRYASHOV B.A.
EXCERPTA MEDICA Sec 14 Vol 12/11 Radiology Nov 58

1818. THE NATURE OF HAEMORRHAGES IN EXPERIMENTAL RADIATION INJURY OF ANIMALS (Russian text) - Kudryashov B.A., Andreenko G.V., Bazazyan G.G., Pastorova V.E., Andre-N., P., Kalishevskaya T.M. and Shimonova E.E. - PROBL. GEMATOL. PEREL. KROVI 1957, 2/6 (3-11) Graphs 5 Tables 7
The authors refer to earlier investigations according to which the haemorrhages are caused by an increase in the heparin content of the blood, while others are of the opinion that the number of blood platelets is lowered. In the experiments, 3,000 white rats were used. They were irradiated with varying doses, up to 1,000 r. at 180 kv., with 0.5 Cu+1 Al filter and also without filter. Injection of P_{32} as sodium phosphate was also used. After the administration of 400-800 r. bleedings occurred on the 8th-15th day. The most marked haemorrhage was seen on the 4th-6th day in the skin and intestinal tract. At doses show an increase in coagulation time as compared to the controls, after 360 hr. oxalate-serum balances the coagulation. In the first phase there is a deficit of prothrombinase and a brittleness of the capillaries. A good restoration effect is obtained by the use of vit. B₁₂ and folic acid. In localized haemorrhages good haemostasis was seen by the use of fibrin-sponges, saturated with a solution of active thrombin.

Seuderling - Helsinki

KUDRYASHOV, B.A.
BLYAKHER, L.Ya.; DETIAP. T.A.; KABAK, Ya.M.; KRUSHINSKIY, L.V.;
KUDRYASHOV, B.A.

Mikhail Mikhailovich Zavadovskii, obituary. Biul. MOIP. Otd. biol.
62 no.4:105-109 Jl-Ag '57. (MIRA 10:11)
(ZAVADOVSKII, MIKHAIL MIKHAILOVICH, 1891-1957)

AUTHOR

KUDRYASHOV, B.A., KALISHEVSKAYA, T.M., PASTOROVA,
V.Ye. and PREOBRAZHENSKAYA, M.Ye.

20-5-59/60

TITLE

Blood Prothrombokinase and Thrombotropine Deficiency in
Splenectomised Rats.
(Nedostatochnost' protrombokinazy krovi i trombotropina u
splenektomirovannykh krys. - Russian)
Doklady Akademii Nauk SSSR 1957 Vol 114 Nr 5, pp 1128-1131
(U.S.S.R.)

PERIODICAL

The authors showed already previously that a complete splenectomy in animals leads to an abrupt thromboplastic activity of the blood. At the same time a certain loss of solidity of the capillaries is observed. The present investigation is dedicated to the study of the immediate causes of the catastrophic reduction of the mentioned blood activity. This activity depends on the amount and quality of prothrombokinase in the blood platelets (of factor 3 of the blood platelets) and on the level of thrombotropine in the plasma. Therefore, when tests were resumed, chief attention was concentrated on the study of the number of blood platelets and the prothrombokinase "charge" contained in them. The concentration of this latter enzyme in the plasma at different stages of the ex-

CARD 1/4

20-5-59/60

Blood Prothrombinase and Thrombotropine Deficiency in
Splenectomised Rats.

periment, the change of the number of erythrocytes, of the percentage of hemoglobin and prothrombine were also studied. Finally the solidity of the capillaries before and after splenectomy was determined. White rats served as test material. In 262 of them the entire spleen, and in 149 only half of the spleen was removed. 145 normal rats served for control. Result: It is known that in splenectomised rats the greatest reduction in thrombo-plastic blood activity is observed between the 6th and 9th day after operation, which fact was confirmed by the authors' tests. The half-operated and the normal animals exhibited no essential changes. Only one death occurred here. Toward the 18th and 25th day the mentioned activity was almost restored to the normal physiological level in the majority of the surviving operated animals. Complete splenectomy inevitably caused the death of part of the animals toward the 5th to 8th day. The prothrombine concentration usually remained unchanged, in individual cases however it completely disappeared from the plasma which was a very bad prognostic symptom. Complete splenectomy, in contrast to a partial one, leads to hypothromb-tropinemia. On the 21rst day the physiological level returns. As is known, thrombotropine-biosynthesis is

CARD 2/4

20-5-59/60

Blood Prothrombokinase and Thrombotropine Deficiency in
Splenectomised Rats.

under control of vitamin K. In operated animals which received large doses of 2-methyl -1,4-naphthoquinone and in others which received small doses of synkavit, the thrombotropine concentration was restored after 24 hours. It was found to decrease further by 15 %. In spite of this restoration the former low thromboplastic blood activity was conserved in the rats. This indicates that the noticed decrease in concentration to 40 % is not the only and main cause of the catastrophic decrease in blood activity. Therefore the prothrombokinase of blood platelets as the second agent on which the formation of blood thrombokinase depends was studied. On the 7th to 8th day after the full operation the number of erythrocytes in the blood is considerably reduced; the number of blood platelets rises sharply. It seems that there occurs a certain absolute increase in platelets at this time. The results indicate that the prothrombokinase deficiency (of factor 3 of the blood platelets) occurring in splenectomised

CARD 3/4

20-5-59/60

Blood Prothrombokinase and Thrombotropine Deficiency in
Splenectomised Rats.

rats is due to an infection agent (bartonellosis). Thus
the insufficiency of blood platelets with regard to
factor 3 may be a consequence of infectious toxicoses.
This phenomenon can be removed by antiinfectious agents.
(4 Tables, 5 Slavic references)

ASSOCIATION: "M.V. Lomonosov" Moscow State University.
(Moskovskiy gosudarstvennyy universitet im.M.V.

Lomonosova)

PRESENTED BY: V.N. Shaposhnikov, member of the Academy.

SUBMITTED: 1.10.56.

AVAILABLE: Library of Congress.

CARD 4/4

KUDRYASHOV, B.A.; ANDREYENKO, G.V.; ULITINA, P.D.

Thrombotropin and prothrombokinase in marine fishes. Mauch.
dokl.vys.shkoly;biol.nauki no.3:98-101 '58. (MIRA 11:12)

1. Predstavlena laboratoriye fiziologii i biokhimii svertvaniya
krovi Moskovskogo gosudarstvennogo universiteta imeni M.V.
Lomonosova.

(THROMBOTROPIN) (FISHES--PHYSIOLOGY) (PROTHROMBOKINASE)

ULITINA, P.D., KUDRYASHOV, B.A.

Determining the thromboplastic activity of human blood. Lab. de lo
4 no.6:7-9 N-D '58 (MIRA 11:12)

1. Iz laboratorii fiziologii i biokhimii svertyvaniya krovi
(zav. prof. B.A. Kudryashov) biologo-pochvennogo fakul'teta Moskovsko-
go gosudarstvennogo universiteta.
(BLOOD--COAGULATION)

KUDRYASHOV, B.A., prof. (Moskva)

Problem of blood coagulation and thrombosis formation. *Klin.*
med. 36 no.10:3-19 0 '58 (MIRA 11:11)

1. Iz Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.
(THROMBOSIS, etiol. & pathogen.
blood coagulation disord., review (Rus))
(BLOOD COAGULATION,
disord., relation to pathogen. of thrombosis
review (Rus))

AUTHORS:

Kudryashov, B. A., Andreyenko, G. V., 20-118-4-21/61
Sytina, N. P.

TITLE:

The Effects of Vitamin B₁₂ and of Folic Acid Upon
the Thromboplastic Activity in the Case of Experimental
Radiation Disease (Deystviye vitamina B₁₂ i foliyevoy
kisloty na tromboplasticheskuyu aktivnost' krovi pri
eksperimental'noy luchevoy bolezni)

PERIODICAL:

Doklady Akademii Nauk SSSR, 1958, Vol. 118, Nr 4,
pp. 701-704 (USSR)

ABSTRACT:

At first short reference is made of previous papers
dealing with the same subject. The authors started the
investigation of the effects of vitamin B₁₂ mentioned
in the title, because vitamin B₁₂ increases the thrombo-
plastic activity of the blood in normal rats. The
experiments were performed with rats of a weight of from
150 to 200 grams, which were irradiated with radiation
doses of from 400 to 800 roentgen. The method of blood

Card 1/4

The Effects of Vitamin B₁₂ and of Folic Acid Upon the 20-118-4-21/61
Thromboplastic Activity in the Case of Experimental
Radiation Disease

investigation was already earlier described (reference 13). Part of the experimental results is compiled in a table. After an irradiation with X-rays of the rats (400 roentgen) the thromboplastic activity of the blood changed in the same way in all animals, whether they received vitamin B₁₂ or not. The same negative results were also determined, when the effect of folic acid and also the simultaneous introduction of vitamin B₁₂ and of folic acid into the organism of the irradiated animals was investigated. The authors also investigated the effects of vitamin B₁₂ and of folic acid on the thromboplastic activity of the blood of rats, which were irradiated wearing a protective girdle. In this case an injection of vitamin B₁₂ or of folic acid has a favorable effect upon the degree of preservation of the thromboplastic activity of the blood. An even more striking result was achieved with a simultaneous introduction of vitamin B₁₂ and of folic acid. In these experiments the thromboplastic activity of the blood on the average

Card 2/4

The Effects of Vitamin B₁₂ and of Folic Acid Upon the Thromboplastic Activity in the Case of Experimental Radiation Disease: 20-128-4-21/61

remained near the lower limit of the physiological level, i.e. in all stages of radiation disease. The survival rate of the test animals remained on a high level as compared with the control animals. Similar results were also obtained, when the animals were irradiated with a dose of 800 roentgen wearing a protective girdle. The protective girdle obviously protects the shielded part of tissue against the loss of biological function. Obviously not the stomach, but the liver is protected. The results obtained speak in favor of the following facts: The thromboplastic activity of the blood is strongly reduced in rats subject to the action of X-rays (dose of from 400-650 roentgen), namely because of a deficiency of blood-protokombin. Finally the results obtained in the paper under consideration are compiled again.

There are 1 figure, 6 tables, and 13 references, 3 of which are Soviet.

Card 3/4

The Effects of Vitamin B₁₂ and of Folic Acid Upon the Thromboplastic Activity in the Case of Experimental Radiation Disease 20-118-4-21/61

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(State University imeni M. V. Lomonosov, Moscow)
PRESENTED: October 11, 1957, by V. N. Shaposhnikov, Member of the
Academy
SUBMITTED: June 27, 1957
AVAILABLE: Library of Congress

Card 4/4

AUTHORS: Kudryashov, B. A., Ulitina, P. D. SOV/20-120-3-66/67

TITLE: Experimental Data on the Existence and Rôle of the Physiological Anticoagulation System (ACS) in the Organism (Eksperimental'nyye dannyye o sushchestvovanii i znachenii fiziologicheskoy antisvertyvayushchey sistemy [ASS] v organizme)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 120, Nr 3,
pp. 677-680 (USSR)

ABSTRACT: The study of the direct causes of an intravascular formation of thrombi has up to now not shown any definite results. It was assumed that on the whole thromboses occur in connection with an increased amount of thrombogen protein components in the blood (references 1, 2), furthermore as a consequence of manifestations of coagulation (references 3 ~ 5), or pathological changes of the vascular walls, which causes moistening of the surfaces (references 5 ~ 7). An experimental investigation of the intravascular formation of thrombi led the authors to the

Card 1/5

Experimental Data on the Existence and Role of SOV/20-120-3-66/67
the Physiological Anticoagulation System (ACS) in the Organism

conclusion that the coagulated matters in the blood channel are apparently caused by a disturbance of a physiological system of anticoagulation. It is the aim of this paper to prove the existence of such a system. In the introduction material and methods are described. White rats were used as experimental animals; they had 110 - ~ 150 g. The blood was drawn from the v. jugularis, where also the intravenous injections were administered. Thromboplastin was prepared from the brain-tissue (according to reference 8). 0,1 M sodium oxalate solution was used for the stabilization of the blood. As known, the brain-thromboplastin considerably accelerates the coagulation of the oxalate blood or of the plasma at its recalcification in vitro. The same is observed in the case of fresh blood in vitro. This is caused by the absence of the tissueprothrombinases in the thromboplastin preparation. Under the influence of plasma components this enzyme changes into an active thrombinase (references 9, 10), the presence of which is necessary for the change of the prothrombin into thrombin in the presence of calcium

Card 2/2

Experimental Data on the Existence and Role of SOV/20-120-3-66/67
the Physiological Anticoagulation System (ACS) in the Organism

ions. It was to be assumed therefore that in the case of an intravenous administration of thromboplastin in vivo coagulated matter will develop in the vessels. On table 1, however, we can see that this process was only in 4 % of the cases fatal. The study of the entire coagulation of blood in surviving animals showed that this process is postponed more than tenfold and that it remains at that level for 7 ~ 10 minutes. Then, slowly normal coagulation sets in again. Thus the administration of thromboplastin in vivo reduced the capacity of coagulation abruptly, contrary to experiments in vivo (table 1), instead of increasing it. The occurring of the thrombin in the blood channel apparently incites any reflectorial mechanism to activity; in the course of that process humoral agents are secreted into the circulating blood which stop the biochemical mechanism of blood coagulation almost instantly and thus save the organism from death. This hypothesis was examined in animals who were deeply anaesthetized by ether. Almost immediately after the thrombin injection they died of

Card 3/5

Experimental Data on the Existence and Role of SOV/20-120-3-66/67
the Physiological Anticoagulation System (ACS) in the Organism

a coagulation of blood in the vessels (table 3). The narcosis or anaesthesia sometimes eliminated the receptors which react on the presence of the thrombin in the blood channel and the animals died of thrombosis, whereas the experimental animals remained alive. Analyses showed that the fibrino-content in the blood of the experimental animals decreased almost fourfold. Heparin-like substances which delay coagulation occurred in considerable quantities. An ACS exists in the organism which reacts on the presence of thrombin in the blood channel and which in the course of its action eliminates the coagulating mechanism. There are 5 tables and 10 references; 7 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)
PRESENTED: February 18, 1958, by V. A. Engel'gardt, Member, Academy of Sciences, USSR
SUBMITTED: February 17, 1958
Card 4/5

Experimental Data on the Existence and Role of SOV/ 1-120-3-65/67
the Physiological Anticoagulation System (ACS) in the Organism

1. Thrombosis--Theory
2. Blood--Pathology
3. Coagulases--Physiological effects
4. Blood--Coagulation

Card 5/5

PASTOROVA, V.Ye.; KUDRYASHOV, B.A.

Effect of bone marrow injections on the thromboplastic activity
of blood in X-irradiated rats. Nauch.dokl.vys.shkoly; biol.
nauki no.1:80-83 '59. (MIRA 12:5)

1. Rekomendovana kafedroy biokhimii zhivotnykh Moskovskogo
gosudarstvennogo universiteta im. M.V.Lomonosova.
(RADIATION PROTECTION) (MARROW) (BLOOD--COAGULATION)

KUDRYASHOV, B.A.; PASTOROVA, V.Ye.; ZAGOREVSKIY, V.A.

Effects of synkavite (tetrasodium salt of 2-methyl-1,4-naphthoquinone diphosphate) on concentrations of prothrombin and convertin and on the thromboplastic activity of the blood in experimental vitamin K deficiency. Vop.med.khim. 5 no.4:279-284 Jl-Ag '59. (MIRA 12:12)

1. Laboratoriya fiziologii i biokhimii svertyvaniya krovi, kafedra biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta.
(VITAMIN K DEFICIENCY exper.)
(BLOOD COAGULATION pharmacol.)

EXCERPTA MEDICA Sec 9 Vol 13/11 Surgery Nov 59

6461. EXPERIMENTAL STUDY OF THROMBUS FORMATION IN THE CIRCULATING BLOOD (Russian text) - Kudryashov B. A. and Ulitina P. D. -

KHIRURGIYA 1059, 2 (77-82) Tables 3

I.v. Injection of definite doses of thromboplastin or thrombin results in disturbance of blood coagulation caused by the sharp drop of the thromboplastic activity in experimental animals, as well as by decrease of fibrinogen concentration in the blood plasma and the appearance of heparin-like substances. This protective reaction, which preserves the fluidity of the circulating blood if thrombin appears in it, is carried out by the physiological anticoagulative system. It was experimentally demonstrated that in anaesthesia caused by sulphuric ether the anticoagulating system temporarily loses its function. In connection with this, blood coagulation occurs in anaesthetized animals into which thrombin is injected i.v. and the animals die of thrombosis.

17(3)

SOV/20-59-124-2-59/71

AUTHORS: Kudryashov, B. A., Andreyenko, G. V., Kukushkina, G. V.

TITLE: Electrophoretic Properties of Some Protein Components of Blood Coagulation (Elektroforeticheskiye svoystva nekotorykh belkovykh komponentov svertyvaniya krovi)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 2, pp 452-455 (USSR)

ABSTRACT: Denotations given by various scientists for the components mentioned in the title, i.e. for one and the same substance often differ from each other (Refs 1-7). It is possible that further investigations of the factors of coagulation which are now known will reduce their number; it is also possible that one and the same substance shows different properties under different conditions. A careful comparative investigation of the subject mentioned in the title, i.e. of those components which participate in the formation of thrombokinase is therefore important. For this purpose the authors investigated electrophoretically the factors X and VII, thrombotropine and thrombokinase. The preparations from the factors VII and X were isolated from the blood serum of horses and rats (according to Refs 12,3). The tissue thrombokinase was produced as suspension from the brain of white rats which had been purified from investing tissues and blood vessels (Ref 14). Thrombotropine was .

Card 1/3

SOV/20-59-124-2-59/71

Electrophoretic Properties of Some Protein Components of Blood Coagulation

isolated by electrophoretic separation of the blood plasma with starch as adsorbent and was then obtained by means of washing out the active fraction by a physiological salt solution (Ref 11).

Figures 1 and 2 show the electrophoresis diagram of the factors VII and X. Table 1 shows the composition of the protein fraction of the blood serum and the factors VII and X. On the basis of the results obtained the authors arrive at the following conclusion:

1) The 3 protein factors which participate in the first phase of the blood coagulation, i.e. the factors VII and X as well as thrombotrapine have different electrophoretic mobility. Therefore they belong to different protein groups. 2) Factor VII is not homogeneous; it forms 2 clearly distinct bands on the electrophoresis diagram which correspond to the α_2 - and γ -globulins of the blood serum. 3) The factor X is homogeneous and is an α -globulin; the same holds also for thrombotropine. 4) It may be assumed that the factor VII consists of blood thrombokinase (immobile fraction) and of thrombotropine (mobile fraction).- There are 4 figures, 2 tables, and 16 references, 3 of which are Soviet.

Card 2/3

SOV/20-59-124-2-59/71

Electrophoretic Properties of Some Protein Components of Blood Coagulation

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: August 26, 1958, by V. A. Engel'gardt, Academician

SUBMITTED: July 24, 1958

Card 3/3

KUDRYASHOV, R.A.; ANDREYENKO, G.V.; KNOKH, I.

Changes in the thromboplastic activity and concentration of pro-thrombin in the blood of animals following introduction of increased doses of vitamin B₁₂ and vitamin K. Nauch.dokl.vys.shkoly: biol.nauki no.4:97-99 '60. (MIRA 13:11)

1. Rekomendovana laboratoriye biekhimii i fizologii svertvaniya krovi Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(PROTHROMBIN)
(CYANOCOBALAMINE)
(VITAMINS--K)

KUDRYASHOV, B.A.

Physiological anticoagulation system and its significance. Vop.
med.khim. 6 no.1:3-13 Ja-F '60. (MIRA 13:5)

1. Laboratoriya fiziologii i biokhimii svertyvaniya krovi pri
kafedre biokhimii zhivotnykh Moskovskogo gosudarstvennogo uni-
versiteta.
(BLOOD COAGULATION physiol.)

KUDRYASHOV, B.A.; ANDREYENKO, G.V.; BAZAZ'YAN, G.G.; KALISHEVSKAYA, T.M.;
PASTOROVA, V.Ye.; SYTINA, N.P.; ULITINA, P.D.

The physiological anticoagulating system and experimental prethrombotic
state of the organism. Vest. Mosk. un. Ser. 6:3-23 Mr-Ap '61.
(MIRA 14:5)

1. Laboratoriya fiziologii i biokhimii svertyvaniya krovi Moskov-
skogo gosudarstvennogo universiteta.
(BLOOD—COAGULATION)

ANDREYENKO, G.V.; KUDRYASHOV, B.A.

Experimental thrombosis and its prevention with a trypsin inhibitor.
Vop. med. khim. 7 no. 1:70-74 Ja-F '61. (MIRA 14:4)

1. Laboratory for Physiology and Biochemistry of Blood Coagulation,
Chair of Animal Biochemistry, Faculty for Biology and Soil
Science of the Moscow State University.
(THROMBOSIS) (TRYPSIN)

ANDREYENKO, G.V.; KUDRYASHOV, B.A.

Influence of a trypsin inhibitor from soy bean on blood coagulation.
Vop. med. khim. 7 no.5:513-519 S-0 '61. (MIRA 14:10)

1. The Laboratory of Physiology and Blood Coagulation Biochemistry
of the Chair of Biochemistry of the Biological soil Faculty of
the Moscow State University.
(BLOOD-COAGULATION) (TRYPSIN)

KUDRYASHOV, B.A.; ANDREYENKO, G.V.; BAZAZ'YAN, G.G.; KALISHEVSKAYA, T.M.;
PASTOROVA, V.Ye.; SYTINA, N.P.; ULITINA, P.D. (Moskva)

Physiological anticoagulation system in an experimental pre-thrombotic state of the organism. Klin.med. 39 no.3:19-30
Mr. '61. (MIRA 14:3)

1. Iz laboratorii fiziologii i biokhimii svertvaniya krovi
(rukovoditel' - prof. B.A. Kudryashov) Moskovskogo universiteta.
(BLOOD—COAGULATION)

KALISHEVSKAYA, T.M.; KOTLYAR, B.I.; KUDRYASHOV, B.A.

Study of the reflex pathways of the physiological anticoagulation system. Biul. eksp. biol. i med. 52 no.7:5-9 Jl '61. (MIRA 15:3)

1. Iz laboratorii biokhimii i fiziologii svertyvaniya krovi (zaveduyushchiy - prof. B.A. Kudryashov) pri kafedre biohimii zhivotnykh, biologo-pochvennogo fakul'teta Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova. Predstavlena deystvitel'nym chlenom AMN SSSR S.Ye. Semerinym.
(BLOOD—COAGULATION)

BAZAZ'YAN, G.G.; SYTINA, N.P.; ANDREYENKO, G.V.; KUDRYASHOV, B.A.

Depression of the physiological functions of the anticoagulation system as a consequence of an atherogenic diet. Biul. eksp. biol. i med. 52 no.10:26-30 0 '61. (MIRA 15:1)

1. Iz laboratorii fiziologii i biokhimii svertvaniya krovi (zav. - prof. B.A. Kudryashov) Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova. Predstavlena deystvitel'nym chlenom AMN SSSR S.Ye. Severinym.
(BLOOD_COAGULATION) (FAT_PHYSIOLOGICAL EFFECT) (DIET)

PASTOROVA, V.Ye.; ROSKIN, G.I.; KUDRYASHOV, B.A.

Function of the physiological anticoagulation system in a
reticulo-endothelial block. Biul. eksp. biol. i med. 52
no.11:23-26 N '61. (MIRA 15:3)

1. Iz laboratorii fiziologii i biohimii svertvaniya
krovi i kafedry histologii biologo-pochvennogo fakul'teta
Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.
Predstavlena deystvitel'nym chlenom AMN SSSR S.Ye. Severinym.
(RETICULO-ENDOTHELIAL SYSTEM) (BLOOD--COAGULATION)

KUDRYASHOV, B.A.

Prethrombotic states of the organism and thrombosis as a result of decreased function of the anticoagulant system.

Report submitted to the Czech. Medical Congress, Medical Society of
J.E. Purkyne, Prague, Czech. 12-17 Nov 1962

KUDRYASKOV, B. A., prof.; PASTOROVA, V. Ye.

Development of a prethrombotic state in the body as a consequence
of experimental splenectomy. Probl. gemat. i perel. krovi no.8:
12-15 '62. (MIRA 15:7)

1. Iz laboratorii fiziologii i biokhimii svertivaniya krovi
biologo-pochvennogo fakul'teta Moskovskogo gosudarstvennogo
universiteta.

(SPLEEN—SURGERY) (BLOOD—COAGULATION)

KUDRYASHOV, B.A.; MOLCHANNOVA, L.V.; BAZAZ'YAN, G.G.; KALISHEVSKAYA, T.M.;
SYTINA, N.P.

Preventive action of antithrombin VI in experimental thrombo-
genesis. Vop.med.khim. 8 no.1:68-72 Ja-F '62. (MIRA 15:11)

1. Laboratoriya fiziologii i biokhimii svertivaniya krovi
kafedry biokhimii zhivotnykh biologo-pochvennogo fakul'teta
Moskovskogo gosudarstvennogo universiteta imeni Lomonosova,
Moskva.

(THROMBOSIS) (ANTICOAGULANTS (MEDICINE))

KUDRYASHOV, B.A., prof.

Contemporary state of the theory of the anticoagulative system
of the blood. Probl. gemat. i perel. krovi no.12:3-14 '62.
(MIRA 16:8)

1. Iz laboratorii fiziologii i biokhimii svertyvaniya krovi
Moskovskogo gosudarstvennogo universiteta.
(BLOOD—COAGULATION)

KUDRYASHOV, B.A.; BAZAZ'YAN, G.G.; BONFITTO, L.L.

Blood lipoprotein lipase and its properties as a component
of the physiological anticoagulant system. Vop. med. khim. 9
no.5:533-535 S-0 '63. (MIRA 17:1)

1. Laboratoriya fiziologii i biokhimii svertyvaniya krovi
(zav. - prof. B.A. Kudryashov) Moskovskogo gosudarstvennogo
universiteta imeni M.V. Lomonosova.

KUDRYASHOV, B.A.

Intravascular thrombogenesis from the physiological and biochemical aspect. Kardiologija 1 no. 5&7-17 '61 (MIRA 17:4)

ILYUSHINA, I.P.; KUDRYASHOV, B.A.

Some signs of the prethrombotic state in atherosclerosis of the coronary arteries. Kardiologija 3 no.4:65-69 Jl-Ag'63
(MIRA 17:3)

1. Iz Instituta terapii (dir. - deyствител'nyy chlen AMN SSSR prof. A.L. Myasnikow) AMN SSSR i laboratorii fiziologii i biokhimii svertyvaniya krovi (zav. - prof. B.A.Kudryashov) Moskovskogo universiteta imeni Lomonosova.

KUDRYASHOV, B.A.; ANDREYENKO, G.V.; YEGOROV, N.S.; STRUKOVA, S.M.;
LANDAU, N.S.

Fibrinolytic agents isolated from some saprophytic fungi
cultures. Dokl. AN SSSR 153 no.4:939-942 D '63.
(MIRA 17:1)
1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
Predstavлено академиком V.N. Shaposhnikovym.

PASTOROVA, V.Ye.; KUDRYASHOV, B.A.

Depression of the function of the physiological antico-agulation system following experimental radiation injury in animals. Biul. eksp. biol. i med. 54 no.9:39-42 S '62.
(MIRA 17:9)

1. Iz laboratorii fiziologii i biokhimii svartyvaniya krovi kafedry biokhimi zhivotnykh Moskovskogo universiteta imeni Lomonosova. Predstavlena deystvitel'nym chlenom AMN SSSR S.Ye. Severinym.

KUDRYASHOV, B.A.; KALISHEVSKAYA, T.M.

Defensive reflex antiplasmin system in the body. Biul. eksp. biol.
i med. 56 no.9:29-33 S '63. (MIRA 17:10)

1. Iz laboratorij biokhimii i fiziologii svertvaniya krovi pri
kafedre biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta imeni Lomonosova. Predstavlena deystvitel'nym chlenom AMN
SSSR S.Ye. Severinym.

KUDRYASHOV, B.A.; USHAKOVA, M.D.; BAZAZ'YAN, G.G.; SYTINA, N.P.

Determination of the possibility of dicoumarin prevention of thrombus formation caused by intravenous administration of massive doses of thromboplastin. Biul. eksp. biol. i med. 57 no.3:26-27 Mr '64.

(MIRA 17:11)

1. Laboratoriya biokhimii i fiziologii svertyvaniya krovi biologo-pochvennogo fakul'teta Moskovskogo ordena Lenina gosudarstvennogo universiteta imeni Lomonosova. Predstavlena deystvitel'nym chlenom AMN SSSR S.Ye. Severinym.

MYASNIKOV, A.L., prof.; KUDRYASHOV, B.A., prof.; CHAZOV, Ye.I., starshiy nauchnyy sotrudnik; ANDREYENKO, G.V., starshiy nauchnyy sotrudnik

Compound fibrinolysin and heparin therapy of vascular thrombosis. Kardiologija no.1:3-8 '64. (MIRA 17:10)

1. Institut terapii AMN SSSR, Moskva. 2. Deystvitel'nyy chlen AMN SSSR (for Myasnikov).

KUDRYASHOV, B.A., prof.; ANDREYENKO, G.V.; KALISHEVSKAYA, T.M.

Neutralization of antiplasmin in the blood during a protective reaction of the physiologic anticoagulation system. Probl. hemat. i perel. krovi 9 no.4:12-15 Ap '64.

(MIRA 17:11)

1. laboratoriya fiziologii i biokhimii svertyvaniya krovi (zav. - prof. B.A. Kudryashov) biologo-pochvennogo fakul'teta Moskovskogo gosudarstvennogo universiteta.

KUDRYASHOV, B.A.; MOLCHANOV, L.V.; BAZAZ'YAN, G.G.

Fibrin-stabilizing factor in various functional states of the
physiological anticoagulation system. Vop.med.khim. 11 no.6:77-
79 N-D '65. (MIRA 18:12)

1. Laboratoriya fiziologii i biokhimii svertyvaniya krovi pri
kafedre fiziologii chaloveka i zhivotnykh Moskovskogo universi-
teta. Submitted April 21, 1965.

Kudryashov, B.B.

AUTHOR: Kudryashov, B.B. 132-58-5-6/14

TITLE: On the Use of the Blowing-through Method for the Boring of Prospecting Wells (O primenenii produvki pri burenii razvedochnykh skvazhin)

PERIODICAL: Razvedka i Okhrana Nedr, 1958, Nr 5, pp 31-37 (USSR)

ABSTRACT: Various gases (air, natural and exhaust) are used instead of flushing mixtures in well boring operations. This method offers many advantages and creates better working conditions for the crew. The amount of gas or compressed air necessary to evacuate the accumulated slime is calculated by applying a formula, described in detail. He also describes the result of experimental drillings which showed that the blowing-through method is more efficient and economical than the old method. There are 2 tables, 1 graph and 6 references, 5 of which are Soviet and 1 English.

ASSOCIATION: Leningradskiy gornyy institut (The Leningrad Mining Institute)

AVAILABLE: Library of Congress
Card 1/1 1. Oil wells-Drilling

KUDRYASHOV, B.B.

Supply and preparation of mud solutions for one of the Krivoy
Rog Trust geological prospecting parties. Sbor.nauch.rab.
stud. LGI no.2:85-93 '57. (MIRA 13:4)

1. Leningradskiy ordenov Lenina i Trudovogo Krasnogo Znameni
gornyy institut im. G.V.Plekhanova. Predstavлено prof. F.A.
Shanashhevym.

(Krivoy Rog--Prospecting--Equipment and supplies)
(Drilling fluids)

KUDRYASHOV, B.B.

Using air for removing cuttings from water encroached well bottoms
in core drilling. Izv.vys.scheb.zav.; geol.i razv. 3 no.4:
126-135 Ap '60. (MIRA 13:7)

1. Leningradskiy gornyy institut.
(Core drilling) (Borings)

KUDRYASHOV, B.B., inzh.

Determination of leakages in pipelines conducting compressed air.
Prom. energ. 17 no.3:14-17 Mr '62. (MIRA 15:2)
(Pipelines--Testing) (Compressed air)

KUDRYASHOV, B. B.

Speed of the free fall of bodies in a medium. Zap. LGI 41 no.2:
53-68 '61. (MIRA 16:5)
(Fluid dynamics)

KUDRYASHOV, B.B.

Air escape in drill pipes in air drilling. Izv.vys.ucheb.zav.;
geol.i razv. 6 no.3:118-125 Mr '63. (MIRA 16:5)

1. Leningradskiy gornyy institut imeni G.V.Plekhanova.
(Boring)

KUDRYASHOV, B.B., inzh.; MIKHAYLOVA, N.D., inzh.

Influence of flush muds on the cooling of bore bits during
rotary drilling. Izv. vys. ucheb. zav.; gor. zhur. 7 no.11:
70-75 '64. (MIRA 18:3)

1. Leningradskiy ordena Lenina i ordena Trudovogo Krasnogo
Znameni gornyy institut imeni Plekhanova. Rekomendovana kafedroy
tekhniki razvedki.

L 07593-67 EWT(d)/EWT(l)/EWT(m)/IMP(e) JD/DT
ACC NR: AP6030436

SOURCE CODE: UR/0420/66/000/006/0082/0089

AUTHOR: Lozitskiy, L. P.; Iyanenko, A. A.; Kudryashov, B. Ya.

ORG: None

TITLE: Experimental installation and method for conducting experiments to determine the fatigue limits of pipeline connections in aircraft hydraulic systems 20

SOURCE: Samoletostroyeniye i tekhnika vozdushnogo flota, no. 6, 1966, 82-89

TOPIC TAGS: fatigue test, test stand, pipeline, hydraulic equipment

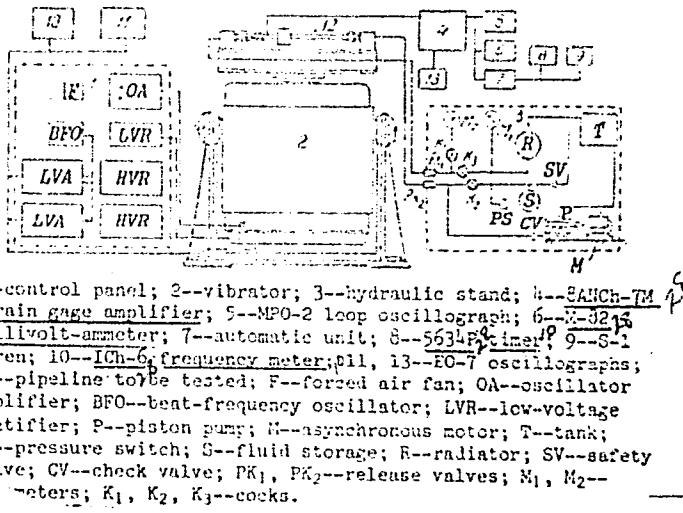
ABSTRACT: The authors describe a unit designed and built at the Kiev Civil Aviation Institute for studying the effect which internal fluid pressure, inaccuracies in assembly, vibration loads due to the power plant and pumps, and other factors have on the fatigue strength of pipeline connections in aircraft hydraulic systems. A block diagram of the installation is shown in the figure. AMG-10 fluid is fed from tank T by gravity feed to the input of pump P operated by motor M. Mounted at the outlet of the pump is a check valve CV from which the fluid is fed through release valve PK₂ simultaneously to the pipeline 12 and fluid storage S. The hydraulic mixture goes from the pipeline through relief valve PK₁, throttle valve K₃ and radiator R to tank T after cooling. Manometer M₂ is used for checking the pressure in the system which is controlled by valve K₃. Valve K₁ may be used to cut the manometer off from the system.

Card 1/3

1 87104-27
ACC NR: AF6030436

8

When the fluid storage S is cut off from the system and the pump is operating, the fluid is delivered with pulsating pressure to the pipeline. The fluid storage unit is charged by opening valve K₂ during operation of the hydraulic stand and then closing this valve to cut off the storage unit from the main system. The energy from fluid storage S may be used for generating static pressure when the stand is not operating. To do this, valve K₃ is closed and valve K₂ is opened. Included in the fluid storage system are manometer M₁, safety valve SV and oil pressure switch PS for checking the fluid pressure level. The stand may be used for generating static pressure in the 0-250 atm range and for feeding a pulsating stream of fluid to the pipeline being tested with a pressure up to 400 atm and an



Card 2/3

L 07593-67
ACC NR: AP6030436

amplitude of 30% of the maximum pressure. The procedure used for checking the fatigue strength of pipeline couplings is described in detail. The unit may be used for testing connections under conditions close to operational for long periods with sufficient accuracy for practical purposes. Use of this equipment for two years has shown that it is highly reliable and convenient in operation. Orig. art. has; 6 figures, 3 formulas.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 005

Card 3/3 *egfr*

L 07596-67 EWT(d)/EWT(m)/EWP(f) DJ
ACC NR: AP6030437

SOURCE CODE: UR/0420/66/000/006/0090/0094

AUTHOR: Lozitskiy, L. P.; Ivanenko, A. A.; Kudryashov, B. Ya.

ORG: None

TITLE: Investigation of the effect which internal fluid pressure and inaccuracies in assembly have on the fatigue strength of pipeline connections in the hydraulic and gas systems of aircraft

SOURCE: ^y Samoletostroyeniye i tekhnika vozduzhnogo flota, no. 6, 1966, 90-94

TOPIC TAGS: fatigue strength, hydraulic equipment, pipeline

ABSTRACT: The effect of various technological and operational factors on the fatigue characteristics of pipeline connections of the type shown in figure 2 was studied by the method illustrated in figure 1. In order to study the effect of each factor separately as well as their combined action, the test program was set up as follows: 1. the fatigue limit of the couplings was studied as a function of axial inaccuracies at zero fluid pressure; 2. the

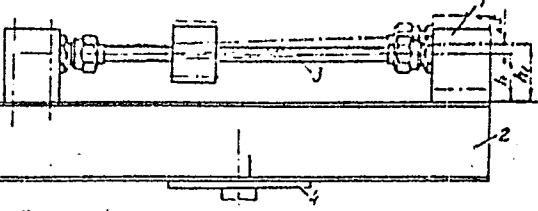


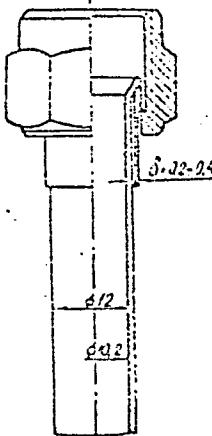
Figure 1

Card 1/3

L 07596-67
ACC NR: AP6030437

Figure 2 /

fatigue limit of the couplings was studied as a function of the pressure of the working fluid; 3. the fatigue limit of the couplings was determined as a function of the combined effect of fluid pressure and axial inaccuracies during assembly. Stresses in the connection fitting were set up by vertical displacement of movable support 1 (figure 1) and were determined by the linear deviation of the support from the axis of neutral deformation of the pipeline. The support was then rigidly fastened to I-beam 2 which was mounted together with specimen 3 on vibrator table 4. The tests were done at a frequency of 200-210 cps for 10^7 cycles or until failure of the specimen. The results are given as semilogarithmic S-N curves. The experimental data show an increase by approximately 8% in the fatigue limit of couplings of this type when the internal fluid pressure is increased from zero to 250 atm with no assembly stresses. Inaccuracies in assembly within the limits of elastic deformations increase the fatigue limit of the specimens tested by approximately 8% with no fluid pressure, while this type of deformation reduces the fatigue limit by 7% at a fluid pressure of 250 atm. Plastic assembly deformations reduce the fatigue limit of the couplings by 9% under zero fluid pressure, and by 18% at a pressure of 250 atm. A straight pressure section of pipeline should be axially located with an accuracy of $\pm 1^\circ$. Straight sections of the main pipeline operating at low pressures should be axially located within $\pm 1.5^\circ$. Differences in testing condi-



Card 2/3

L 07596-67
ACC NR: AP6030437

tions (bending with rotation and resonance oscillations) result in different fatigue limits. Orig. art. has: 4 figures.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 007

Card 3/3 eight

Kudryashov, ~~R.S.~~ Ya.

86-1-27/30

AUTHOR: Aronin, G.S., Engr Col, Docent, Candidate of Technical Sciences; and Medvedev, S.S., Engr Lt Col, Candidate of Technical Sciences.

TITLE: Estimating the Combat Capacities of Fighters (O rashchete boyevykh vozmozhnostey istrebiteley).

PERIODICAL: Vestnik Vozdushnogo Flota, 1958, Nr 1, pp. 84-86 (USSR)

ABSTRACT: Under this title appear two articles under the following subtitles: 1. "Unjustified Method" by Engr Col G.S. Aronin and 2. "To Continue the Research for a More Acceptable Method", by Engr Lt Col S.S. Medvedev. The authors discuss the article "Combat Capacities of Fighters and the Method of Determining Them" by Col R.Ya. Kudryashov and Lt Col P.G. Nikitin, which was published in the No. 8 issue of this periodical in 1957. Both, Aronin and Medvedev, raised

Card 1/2

86-1-27/30

Estimating the Combat Capacities of Fighters (Cont.)

some objections to the method suggested by Kudryashov and Nikitin. Particular attention is drawn to the inadequacy of the new concept of "determining the degree of superiority of the fighter-plane over the enemy", which is expressed by coefficient C in the final formula of the computations.

AVAILABLE: Library of Congress

Card 2/2

KUDRYASHOV, D.

Teacher in vocational education and class adviser. Prof.-tekhn.
obr. 19 no.11:25 N '62. (MIRA 16:2)
(Vocational education)

KUDRYASHOV, G., podpolkovnik

Mechanization of loading and unloading operations at a fleet ware-house, Tyl i snab. Sov. Voor. Sil 21 no.7:83-85 Jl '61.

(MIRA 14:8)

(Loading and unloading)

SHVANG, L.I.,; KUDRYASHOV, G.F.,; TROFIMOV, V.I.

Registration of fetal heart tones. Fiziol. zh. SSSR 42
no.1:117-119 Ja 56. (MIRA 9:5)

1. Laboratoriya fizioligii Instituta akusherstva i ginekologii
AMN SSSR, Leningrad.
(HEART, embryology,
intrauterine registration of tonus (Rus))